

Type of file: figure

Label: Figure 1

Filename: FigureESM1_ResubmissionJuly_2011.doc

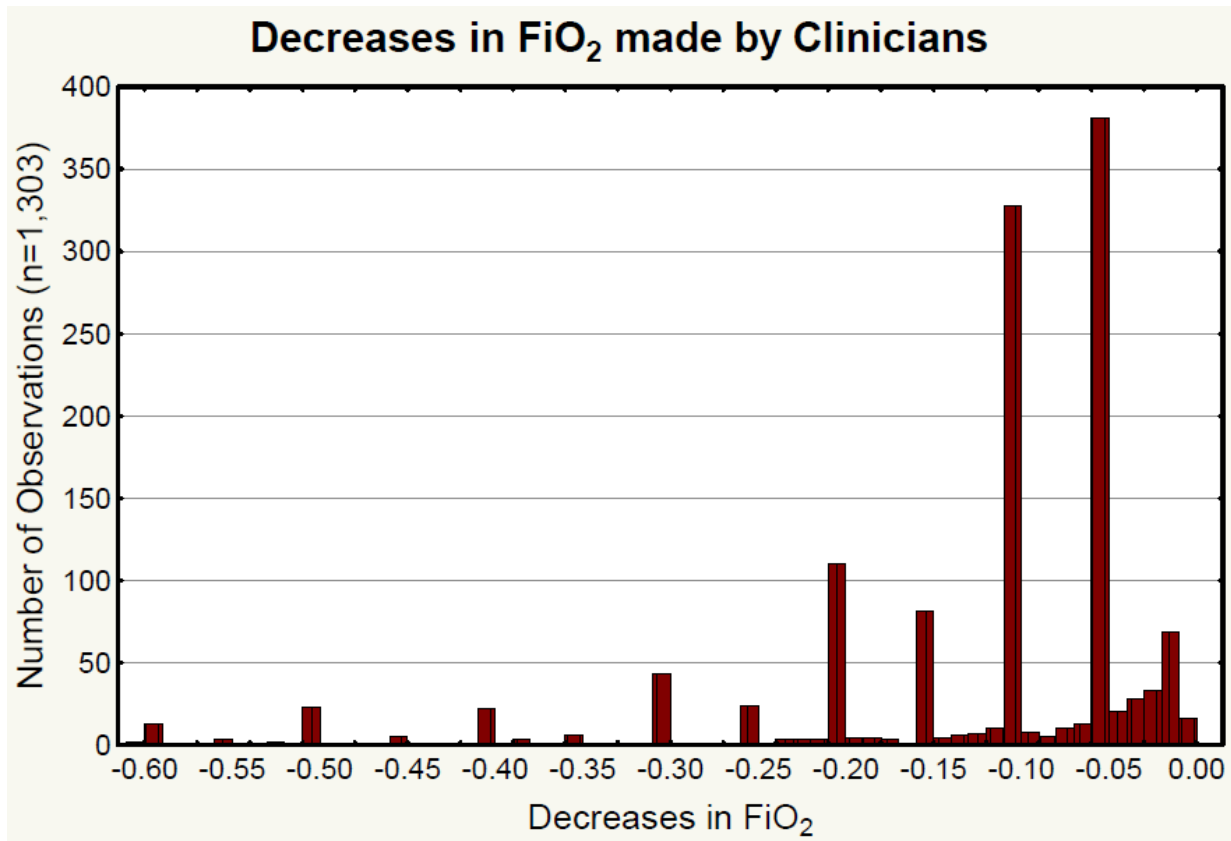


Fig ESM 1 For 6,017 charted ventilator settings, FiO₂ was decreased 1,303 times. While clinicians sometimes make extremely small (0.01) changes to FiO₂, the most frequent changes occur at intervals of 0.05, although many also make decreases at intervals of 0.1. Similar results are seen for increases in FiO₂.

Type of file: table

Label: Tables 1 & 2

Filename: Table_ESM2_ICMResubmissionJuly_2011.doc

PIP \ pH	≤ 28 cm H ₂ O	28-35 cm H ₂ O	> 35 cm H ₂ O	
>7.45	Dec. PIP by 2 cm H ₂ O Dec. VR by 20% 1	Dec. PIP by 2 cm H ₂ O 7	Dec. PIP by 4 cm H ₂ O 13	
7.30-7.45	Dec PIP by 2 cm H ₂ O 2	Dec. PIP by 2 cm H ₂ O 8	Dec. PIP by 2 cm H ₂ O 14	
7.15-7.30 VR <25	Inc. PIP by 2 cm H ₂ O Inc. VR by 20% 3	No change to PIP Inc. VR by 20% 9	Dec. PIP by 2 cm H ₂ O Inc. VR by 20% 5	
7.15-7.30 VR ≥ 25	Inc. PIP by 4 cm H ₂ O 4	No change to PIP or VR Consider NaHCO ₃ if PCO ₂ < 25 10	Dec. PIP by 2 cm H ₂ O Consider NaHCO ₃ if PCO ₂ < 25 16	
< 7.15 VR < 25	Inc. PIP by 4 cm H ₂ O Inc. VR by 20% 5	Inc. PIP by 2 cm H ₂ O Inc. VR by 20% 11	Inc. VR by 20% Consider NaHCO ₃ if PCO ₂ < 25 17	
< 7.15 VR ≥ 25	Inc. PIP by 4 cm H ₂ O Consider NaHCO ₃ if PCO ₂ < 25 6	Inc. PIP by 2 cm H ₂ O Consider NaHCO ₃ if PCO ₂ < 25 12	No change to PIP or VR Consider NaHCO ₃ if PCO ₂ < 25 18	
Legend (% agreement of clinical care with protocol recommendation)				
> 50% agreement	40 to 50% agreement	30 to <40% agreement	< 30% agreement	< 10 Observations

Table ESM 2: Adapted ventilation table for PC mode for the non co-morbid cohort (N=1,484), with cell numbers listed in the lower left hand corner of each cell (corresponding to Table 5). For changes in ventilation (PIP or Vent Rate) each ABG/Ventilator setting combination was categorized into the boxes on the above ventilation table. The direction of change to VR and PIP which clinicians chose was compared to the direction of change of the ventilator protocol's recommendation. Colors represent percent agreement with ventilator protocol recommendations: >50% agreement (green), 40-50% (yellow), 30-40% (orange), < 30% (red), excluded cells (<10 observations, grey). Note that changes to PIP and VR are similar between the non co-morbid cohort, the entire cohort (Table 4a) and the ALI group (Table 4b), particularly when pH is >7.30.